

CLAIMS

Having thus described the invention, what is claimed is:

1. A sliding bone support plate assembly having a first overall length, and comprising first and second plates which slide with respect to each other thus to vary the first overall length of said bone support plate assembly,

said first plate having at least a first bone fastener aperture for receiving therethrough at least a first bone fastener adapted to fasten said first plate to a first vertebra,

said second plate having at least a second bone fastener aperture for receiving therethrough at least a second bone fastener adapted to fasten said second plate to a second vertebra,

said first and second plates comprising cooperating first and second sliding structures which enable interconnecting the first and second plates with corresponding longitudinal sliding movement of the first and second plates with respect to each other, thus to accommodate varying the first overall length of said bone support plate assembly,

said plate assembly being structured from bio-compatible and bio-stable materials which are safe for use in a living human body for an extended period of time, and which are not assimilated into such living human body,

sliding of said first and second plates with respect to each other facilitating post-procedural settling of such first and second vertebrae with respect to each other, and relieving, from said plate assembly, stress potentially imposed by such post-procedural vertebral settling.

2. A sliding bone support plate assembly as in Claim 1 wherein such post-procedural settling results in maintaining the first and second vertebrae under post-procedural axial loading.

3. A sliding bone support plate assembly as in Claim 1, said sliding bone support plate assembly further comprising cover apparatus associated with at least one of the bone fastener apertures, said cover apparatus automatically extending over a bone fastener which is driven in a respective one of the bone fastening apertures, when a cover land associated with the respective bone fastener moves past said cover apparatus.

4. A sliding bone support plate assembly as in Claim 1, said sliding bone support plate assembly further comprising temporary length retention structure, effective to temporarily fix the first overall length of said sliding bone support plate assembly at a temporarily fixed overall length prior to and/or during installation of said sliding bone support plate assembly in a recipient user.

5. A sliding bone support plate assembly as in Claim 4 wherein said temporary length retention structure comprises at least one coupling screw.

6. A sliding bone support plate assembly as in Claim 4 wherein said first plate comprises a first coupling screw aperture, and said second plate comprises a second coupling screw aperture adapted to be aligned with the first coupling screw aperture at the temporarily fixed overall length, and wherein said temporary length retention structure comprises a coupling screw adapted to connect the first and second coupling screw apertures to each other, thereby to fix the overall length of said sliding bone support plate assembly at the temporarily fixed overall length.

7. A sliding bone support plate assembly as in Claim 1, said sliding structure on said first plate comprising a channel, and said sliding structure on said second plate comprising a rail sliding in said channel.

8. A sliding bone support plate assembly as in Claim 1, said sliding structure on said first plate comprising first and second channels, and said sliding structure on said second plate comprising first and second rails sliding in said first and second channels.

9. A sliding bone support plate assembly as in Claim 1, said sliding structure on said first plate comprising first and second channels, and said sliding structure on said second plate comprising first and second opposing lateral sides, said first and second channels on said first plate receiving the opposing lateral sides of said second plate, said opposing lateral sides of said second plate sliding with respect to the channels of said first plate.

10. A sliding bone support plate assembly as in Claim 1, said sliding structures of said first and second plates comprising cooperating tongue and groove structures.

11. A sliding bone support plate assembly as in Claim 1, said first plate comprising a first major surface, said second plate comprising a second major surface, a first portion of the first major surface of said first plate facing a second portion of the second major surface of said second plate, at least substantial portions of the cooperating sliding structures on said first and second plates being embodied in the facing major surfaces of the first and second plates.

12. A sliding bone support plate assembly as in Claim 11 wherein the cooperating sliding structures comprise dovetail structures on the facing portions of the facing major surfaces.

13. A sliding bone support plate assembly as in Claim 11 wherein the cooperating sliding structures comprise at least two female dovetail sliding elements, and at least two male dovetail sliding elements cooperating with the at least two female dovetail sliding elements, on the facing portions of the facing major surfaces.

14. A sliding bone support plate assembly as in Claim 1, each of said first and second plates comprising at least first and second bone fastener apertures adapted to receive bone fasteners therethrough, each of said first and second plates further comprising a retainer which extends between the respective first and second bone fastener apertures, and which automatically extends over a land associated with such bone fastener which is driven through one of the first and second bone fastener apertures, when a such land associated with the respective bone fastener moves past said retainer.

15. A sliding bone support plate assembly as in Claim 1, sliding of said first and second plates with respect to each other facilitating post-procedural settling of such first and second vertebrae with respect to each other, which post-procedural compression enables maintaining such first and second vertebrae under post-procedural axial loading, and relieving, from said plate assembly, stress potentially imposed by such post-procedural vertebral settling.

16. A sliding bone support plate assembly as in Claim 1, said first and second plates being adapted to slide with respect to each other during post-procedural settling of such first and second vertebrae with respect to each other, without corresponding movement of said first and second plates with respect to underlying ones of such first and second vertebrae to which said first and second plate are mounted.

17. A sliding bone support plate assembly as in claim 1, said sliding bone support plate assembly comprising a spinal plate assembly.

18. A sliding bone support plate assembly having a first overall length, and comprising first and second plates which slide with respect to each other thus to vary the first overall length of said bone support plate assembly,

said first plate having at least a first insert accepting track, each said insert accepting track having a first interior side X and a second interior side Y,

said second plate having at least a first insert structure, each said insert structure having a first lateral side X' and a second lateral side Y',

side X' of said first insert structure being in sliding communication with side X of said first insert accepting track, side Y' of said first insert structure being in sliding communication with side Y of said first insert accepting track,

at least one said insert structure extending continuously between side X' and side Y',

each of said first and second plates further comprising at least one bone fastener aperture adapted to receive a bone fastener therethrough thus to facilitate mounting the respective said plate to at least first and second vertebrae,

said plate assembly being structured from bio-compatible and bio-stable materials which are safe for use in a living human body for an extended period of time, and which are not assimilated into such living human body.

19. A sliding bone support plate assembly as in Claim 18, sliding of said first and second plate with respect to each other facilitating post-procedural settling of such first and second vertebrae with respect to each other, which post-procedural settling enables maintaining such first and second vertebrae under post-procedural axial loading, and relieving, from said plate assembly, stress imposed by such post-procedural vertebral settling.

20. A sliding bone support plate assembly as in Claim 18, said sliding bone support plate assembly further comprising cover apparatus associated with each of the bone fastener apertures, said cover apparatus automatically extending over a bone fastener which is driven in a respective one of the bone fastening apertures, when a cover land associated with the respective bone fastener moves past said cover apparatus.

21. A sliding bone support plate assembly as in Claim 18, said sliding bone support plate assembly further comprising temporary length retention structure, effective to temporarily fix the first overall length of said sliding bone support plate assembly at a temporarily fixed overall length prior to installation of said sliding bone support plate assembly in a recipient user.

22. A sliding bone support plate assembly as in Claim 21 wherein said temporary length retention structure comprises at least one coupling screw.

23. A sliding bone support plate assembly as in Claim 21 wherein said first plate comprises a first coupling screw aperture, and said second plate comprises a second coupling screw aperture adapted to be aligned with the first coupling screw aperture at the temporarily fixed overall length, and wherein said temporary length retention structure comprises a coupling screw adapted to connect the first and second coupling screw apertures to each other, thereby to fix the overall length of said sliding bone support plate assembly at the temporarily fixed overall length.

24. A sliding bone support plate assembly as in Claim 18, said insert-accepting track on said first plate comprising a channel, said insert structure on said second plate comprising a rail sliding in said channel.

25. A sliding bone support plate assembly as in Claim 18, said insert-accepting track on said first plate comprising first and second channels, said insert

structure on said second plate comprising first and second rails sliding in said first and second channels.

26. A sliding bone support plate assembly as in Claim 18, said insert-accepting track on said first plate comprising first and second channels, and said insert structure on said second plate comprising first and second opposing lateral sides, said first and second channels on said first plate receiving the opposing lateral sides of said second plate, said opposing outer sides of said second plate sliding with respect to the channels of said first plate.

27. A sliding bone support plate assembly as in Claim 18, said sliding insert-accepting track of said first plate and said insert structure of said second plate comprising cooperating tongue and groove structures.

28. A sliding bone support plate assembly as in Claim 18, said first plate comprising a first major surface, said second plate comprising a second major surface, a first portion of the first major surface of said first plate facing a second portion of the second major surface of said second plate, at least substantial portions of the insert-accepting track and the insert structure being embodied in the facing major surfaces of the first and second plates.

29. A sliding bone support plate assembly as in Claim 28 wherein the insert-accepting track and the insert structure comprise dovetail structures on the facing portions of the facing major surfaces.

30. A sliding bone support plate assembly as in Claim 28 wherein the insert-accepting track and the insert structure comprise at least two female dovetail sliding elements, and at least two male dovetail sliding elements cooperating with the at least two female dovetail sliding elements, on the facing portions of the facing major surfaces.



31. A sliding bone support plate assembly as in Claim 18, each of said first and second plates comprising at least first and second bone fastener apertures adapted to receive bone fasteners therethrough, each of said first and second plates further comprising a retainer which extends between the respective first and second bone fastener apertures, and which automatically extends over a land associated with such bone fastener which is driven through either of the first and second bone fastener apertures, when a such land associated with the respective bone fastener moves past said retainer.

32. A sliding bone support plate assembly as in Claim 18, said first and second plates being adapted to slide with respect to each other during post-procedural settling of such first and second vertebrae with respect to each other, without corresponding movement of said first and second plates with respect to underlying ones of such first and second vertebrae to which said first and second plate are mounted.

33. A sliding bone support plate assembly as in claim 18, said sliding bone support plate assembly comprising a spinal plate assembly.

34. A sliding bone support plate assembly having a first overall length, and comprising first and second plates which slide with respect to each other thus to vary the first overall length of said bone support plate assembly,

said first plate having one or more longitudinally extending sliding apertures,

said second plate having one or more longitudinally extending sliding inserts, each having a width extending between opposing outer sides thereof,

at least one combination of one of said sliding apertures and one of said sliding inserts being adapted and configured with one or more insert-accepting tracks



which facilitate sliding engagement of the respective said sliding insert and sliding aperture,

at least one of said one or more sliding inserts, in said sliding apertures, extending continuously between the opposing sides of the respective sliding insert,

said plate assembly being structured from bio-compatible and bio-stable materials which are safe for use in a living human body for an extended period of time, and which are not assimilated into such living human body.

35. A sliding bone support plate assembly as in Claim 34, sliding of said first and second plates with respect to each other facilitating post-procedural settling of such first and second vertebrae with respect to each other, which post-procedural settling enables maintaining such first and second vertebrae under post-procedural axial loading, and relieving, from said plate assembly, stress potentially imposed by such post-procedural vertebral settling.

36. A sliding bone support plate assembly as in Claim 34, said sliding bone support plate assembly further comprising cover apparatus associated with each of the bone fastener apertures, said cover apparatus automatically extending over a bone fastener which is driven in a respective one of the bone fastening apertures, when a cover land associated with the respective bone fastener moves past said cover apparatus.

37. A sliding bone support plate assembly as in Claim 34, said sliding bone support plate assembly further comprising temporary length retention structure, effective to temporarily fix the first overall length of said sliding bone support plate assembly at a temporarily fixed overall length prior to and/or during installation of said sliding bone support plate assembly in a recipient user.

38. A sliding bone support plate assembly as in Claim 37 wherein said temporary length retention structure comprises at least one coupling screw.

39. A sliding bone support plate assembly as in Claim 37 wherein said first plate comprises a first coupling screw aperture, and said second plate comprises a second coupling screw aperture adapted to be aligned with the first coupling screw aperture at the temporarily fixed overall length, and wherein said temporary length retention structure comprises a coupling screw adapted to connect the first and second coupling screw apertures to each other, thereby to fix the overall length of said sliding bone support plate assembly at the temporarily fixed overall length.

40. A sliding bone support plate assembly as in Claim 34, said insert-accepting track comprising a channel on one of said first and second plates, the other of said first and second plates comprising a rail sliding in said channel.

41. A sliding bone support plate assembly as in Claim 34, said insert-accepting track comprising first and second channels on one of said first and second plates, the other of said first and second plates comprising first and second rails sliding in said first and second channels.

42. A sliding bone support plate assembly as in Claim 34, said insert-accepting track, on said first plate, comprising first and second channels said second plate comprising first and second ones of said sliding inserts, said first and second channels on said first plate receiving said first and second sliding inserts of said second plate, whereby said first and second sliding inserts of said second plate can slide with respect to the first and second channels of said first plate.

43. A sliding bone support plate assembly as in Claim 34, said one or more sliding apertures of said first plate and said one or more sliding inserts of said second plate comprising cooperating tongue and groove structures.

44. A sliding bone support plate assembly as in Claim 34, said first plate comprising a first major surface, said second plate comprising a second major surface, a first portion of the first major surface of said first plate facing a second portion of the second major surface of said second plate, the at least one said sliding aperture, and the at least one said sliding insert, being embodied in the facing major surfaces of the first and second plates.

45. A sliding bone support plate assembly as in Claim 44 wherein the one or more sliding inserts and the one or more sliding apertures comprise dovetail structures on the facing portions of the facing major surfaces.

46. A sliding bone support plate assembly as in Claim 44 wherein the one or more sliding inserts and the one or more sliding apertures comprise at least two female dovetail sliding elements, and at least two male dovetail sliding elements cooperating with the at least two female dovetail sliding elements, on the facing portions of the facing major surfaces.

47. A sliding bone support plate assembly as in Claim 34, each of said first and second plates comprising at least first and second bone fastener apertures adapted to receive bone fasteners therethrough, each of said first and second plates further comprising a retainer which extends between the respective first and second bone fastener apertures, and which automatically extends over a land associated with such bone fastener which is driven through either of the first and second bone fastener apertures, when a such land associated with the respective bone fastener moves past said retainer.

48. A sliding bone support plate assembly as in claim 34, said sliding bone support plate assembly comprising a spinal plate assembly.

49. A sliding bone support plate assembly having a first overall length, and comprising first and second plates which slide with respect to each other thus to vary the first overall length of said bone support plate assembly,

said first plate having a first length, first opposing side edges, and at least a first bone fastener aperture adapted to receive a first bone fastener therethrough thus to facilitate mounting said first plate to a first vertebra of a recipient user, said first plate comprising a first major surface, and a male dovetail structure extending outwardly from the first major surface and along the first length of the first plate, the first major surface comprising a wing element thereof between said male dovetail and a respective one of said first side edges,

said second plate having a second length, second opposing side edges, and at least a second bone fastener aperture adapted to receive a second bone fastener therethrough thus to facilitate mounting said second plate to a second vertebra of the recipient user, said second plate comprising a second major surface facing the first major surface of said first plate, and a female dovetail structure extending inwardly from the second major surface and along the second length of the second plate, the second major surface comprising a plate land element thereof between said female dovetail structure and a respective one of the second side edges, and adjacent said wing element of said first major surface,

said male and female dovetail structures cooperating with each other and thereby enabling interconnecting and engagement of the first and second plates to each other along the male and female dovetail structures, as well as along the first and second major surfaces, including sliding engagement of said wing element and said plate land element with each other.

50. A sliding bone support plate assembly as in Claim 49, said plate assembly being fabricated using bio-compatible and bio-stable materials which are safe for use in a living human body for an extended period of time, and which are not assimilated into such living human body.

51. A sliding bone support plate assembly as in Claim 49, sliding of said first and second plates with respect to each other facilitating post-procedural settling of such first and second vertebrae with respect to each other, and relieving, from said plate assembly, stress imposed by such post-procedural vertebral settling.

52. A sliding bone support plate assembly as in Claim 49, said sliding bone support plate assembly further comprising cover apparatus associated with at least one of the bone fastener apertures, said cover apparatus automatically extending over a bone fastener which is driven in a respective one of the bone fastening apertures, when a cover land associated with the respective bone fastener moves past said cover apparatus.

53. A sliding bone support plate assembly as in Claim 49 wherein said female dovetail structure comprises at least first and second dovetail channels extending from said second major surface.

54. A sliding bone support plate assembly as in Claim 49 wherein said male dovetail structure comprises at least first and second dovetail ridges extending from said second major surface.

55. A sliding bone support plate assembly as in Claim 49, each of said first and second plates comprising at least first and second bone fastener apertures adapted to receive bone fasteners therethrough, each of said first and second plates further comprising a retainer which extends between the respective first and second bone fastener apertures, and which automatically extends over a land associated with such bone fastener which is driven through either of the first and second bone fastener apertures, when a such land associated with the respective bone fastener moves past said retainer.

56. A sliding bone support plate assembly as in Claim 49, said first and second plates being adapted to slide with respect to each other during post-procedural settling of such first and second vertebrae with respect to each other, without corresponding movement of said first and second plates with respect to underlying ones of such first and second vertebrae to which said first and second plate are mounted.

57. A sliding bone support plate assembly as in claim 49, said sliding bone support plate assembly comprising a spinal plate assembly.

58. A sliding bone support plate assembly, comprising:

- (a) a first plate having first and second opposing major surfaces, a first plate length, a first plate width, and a first plate thickness between the first and second opposing major surfaces;
- (b) a second plate having third and fourth opposing major surfaces, a second plate length, a second plate width, and a second plate thickness between the third and fourth opposing major surfaces;

said first and second plates comprising cooperating first and second sliding surfaces which cooperate with each other and thereby enable interconnecting the first and second plates such that the first and second plates define a third composite length, wherein the magnitude of the third composite length varies as the first and second plates slide with respect to each other, and wherein movement of the first and second plates with respect to each other is limited to varying the magnitude of the third composite length,

said plate assembly being structured from bio-compatible and bio-stable materials which are safe for use in a living human body for an extended period of time, and which are not assimilated into such living human body.

59. A sliding bone support plate assembly as in Claim 58 wherein, when said first and second plates are mounted to underlying first and second bones, magnitude of movement of the first and second plates with respect to each other corresponds generally with magnitude of movement of such underlying first and second bones with respect to each other.

60. A sliding bone support plate assembly as in claim 58, said sliding bone support plate assembly comprising a spinal plate assembly.

61. A sliding bone support plate assembly having a first overall length, and comprising first and second plates which slide with respect to each other thus to vary the first overall length of said bone support plate assembly,

said first plate having at least a first bone fastener aperture for receiving therethrough at least a first bone fastener adapted to fasten said first plate to a first vertebra,

said second plate having at least a second bone fastener aperture for receiving therethrough at least a second bone fastener adapted to fasten said second plate to a second vertebra,

said first and second plates comprising cooperating first and second sliding structures which enable interconnecting the first and second plates with corresponding longitudinal sliding movement of the first and second plates with respect to each other, thus to accommodate varying the first overall length of said bone support plate assembly,

said plate assembly being structured from bio-compatible and bio-stable materials which are safe for use in a living human body for an extended period of time, and which are not assimilated into such living human body,

sliding of said first and second plates with respect to each other facilitating post-procedural settling of such first and second vertebrae with respect to each other,



said first and second plates being adapted to slide with respect to each other during post-procedural settling of such first and second vertebrae, without corresponding movement of said first and second plates with respect to underlying ones of such first and second vertebrae to which said first and second plates are mounted.

62. A sliding bone support plate assembly as in Claim 61 wherein such post-procedural settling results in maintaining the first and second vertebrae under post-procedural axial loading.

63. A sliding bone support plate assembly as in Claim 61, said sliding bone support plate assembly further comprising cover apparatus associated with at least one of the bone fastener apertures, said cover apparatus automatically extending over a bone fastener which is driven in a respective one of the bone fastening apertures, when a cover land associated with the respective bone fastener moves past said cover apparatus.

64. A sliding bone support plate assembly as in Claim 61, said sliding bone support plate assembly further comprising temporary length retention structure, effective to temporarily fix the first overall length of said sliding bone support plate assembly at a temporarily fixed overall length prior to and/or during installation of said sliding bone support plate assembly in a recipient user.

65. A sliding bone support plate assembly as in Claim 61, said sliding structure on said first plate comprising a channel, and said sliding structure on said second plate comprising a rail sliding in said channel.

66. A sliding bone support plate assembly as in Claim 61, said sliding structure on said first plate comprising first and second channels, and said sliding structure on said second plate comprising first and second rails sliding in said first and second channels.

67. A sliding bone support plate assembly as in Claim 61, said sliding structure on said first plate comprising first and second channels, and said sliding structure on said second plate comprising first and second opposing lateral sides, said first and second channels on said first plate receiving the opposing lateral sides of said second plate, said opposing lateral sides of said second plate sliding with respect to the channels of said first plate.

68. A sliding bone support plate assembly as in Claim 61, said sliding structures of said first and second plates comprising cooperating tongue and groove structures.

69. A sliding bone support plate assembly as in Claim 61, said first plate comprising a first major surface, said second plate comprising a second major surface, a first portion of the first major surface of said first plate facing a second portion of the second major surface of said second plate, at least substantial portions of the cooperating sliding structures on said first and second plates being embodied in the facing major surfaces of the first and second plates.

70. A sliding bone support plate assembly as in Claim 61 wherein the cooperating sliding structures comprise dovetail structures on the facing portions of the facing major surfaces.

71. A sliding bone support plate assembly as in Claim 61, each of said first and second plates comprising at least first and second bone fastener apertures adapted to receive bone fasteners therethrough, each of said first and second plates further comprising a retainer which extends between the respective first and second bone fastener apertures, and which automatically extends over a land associated with such bone fastener which is driven through one of the first and second bone fastener apertures, when a such land associated with the respective bone fastener moves past said retainer.

72. A sliding bone support plate assembly as in claim 61, said sliding bone support plate assembly comprising a spinal plate assembly.

73. A sliding bone support plate assembly comprising first and second plates,

said first plate having at least a first bone fastener aperture,

said second plate having at least a second bone fastener aperture,

said first and second plates comprising cooperating first and second sliding structures interconnecting the first and second plates with corresponding longitudinal sliding movement of the first and second plates with respect to each other,

said sliding bone support plate assembly accommodating post-procedural plate-to-plate sliding of said first and second plates with respect to each other without corresponding sliding of either said plate with respect to a bone to which the respective said plate is mounted.

74. A sliding bone support plate assembly as in Claim 73 wherein such post-procedural settling results in maintaining the first and second vertebrae under post-procedural axial loading.

75. A sliding bone support plate assembly as in Claim 73, said sliding bone support plate assembly further comprising cover apparatus associated with at least one of the bone fastener apertures, said cover apparatus automatically extending over a bone fastener which is driven in a respective one of the bone fastening apertures, when a cover land associated with the respective bone fastener moves past said cover apparatus.

76. A sliding bone support plate assembly as in Claim 73, said sliding bone support plate assembly further comprising temporary length retention structure, effective to temporarily fix the first overall length of said sliding bone support plate assembly at a temporarily fixed overall length prior to and/or during installation of said sliding bone support plate assembly in a recipient user.

77. A sliding bone support plate assembly as in Claim 73, said sliding structure on said first plate comprising a channel, and said sliding structure on said second plate comprising a rail sliding in said channel.

78. A sliding bone support plate assembly as in Claim 73, said sliding structure on said first plate comprising first and second channels, and said sliding structure on said second plate comprising first and second rails sliding in said first and second channels.

79. A sliding bone support plate assembly as in Claim 73, said sliding structure on said first plate comprising first and second channels, and said sliding structure on said second plate comprising first and second opposing lateral sides, said first and second channels on said first plate receiving the opposing lateral sides of said second plate, said opposing lateral sides of said second plate sliding with respect to the channels of said first plate.

80. A sliding bone support plate assembly as in Claim 73, said sliding structures of said first and second plates comprising cooperating tongue and groove structures.

81. A sliding bone support plate assembly as in Claim 73, said first plate comprising a first major surface, said second plate comprising a second major surface, a first portion of the first major surface of said first plate facing a second portion of the second major surface of said second plate, at least substantial portions

of the cooperating sliding structures on said first and second plates being embodied in the facing major surfaces of the first and second plates.

82. A sliding bone support plate assembly as in Claim 73 wherein the cooperating sliding structures comprise dovetail structures on the facing portions of the facing major surfaces.

83. A sliding bone support plate assembly as in Claim 73, each of said first and second plates comprising at least first and second bone fastener apertures adapted to receive bone fasteners therethrough, each of said first and second plates further comprising a retainer which extends between the respective first and second bone fastener apertures, and which automatically extends over a land associated with such bone fastener which is driven through one of the first and second bone fastener apertures, when a such land associated with the respective bone fastener moves past said retainer.

84. A sliding bone support plate assembly as in claim 73, said sliding bone support plate assembly comprising a spinal plate assembly.

85. A method of installing a bone support plate assembly in a recipient thereof, the bone support plate assembly having an overall length, and comprising first and second plates which are slidably engaged with each other, so as to slide with respect to each other thus to vary the overall length of the bone support plate assembly, the method comprising:

- (a) placing the bone support plate assembly at a mounting location in a recipient user of the bone support plate assembly;
- (b) fastening the first and second plates to first and second bones of the recipient user of the bone support plate assembly; and

- (c) releasing, as necessary, any fixation structure which temporarily fixes the overall length of the bone support plate assembly so as to accommodate sliding of the first and second plates with respect to each other, and correspondingly accommodating post-procedural settling of such first and second bones with respect to each other.

86. A method as in Claim 85, the method further comprising temporarily fixing the overall length of the plate assembly prior to or while installing the bone support plate assembly.

87. A method as in Claim 85, the method further comprising evaluating the bone structure of the recipient user during the course of installing the bone support plate assembly, and releasing, adjusting, and temporarily re-setting the overall length of the bone support plate assembly prior to completion of the fastening of the first and second plates to the first and second bones of the recipient user.

88. A method as in Claim 85 including installing, as the sliding bone support plate assembly, a sliding spinal plate assembly.

89. A method of installing a bone support plate assembly in a recipient thereof, the bone support plate assembly having an overall length, and comprising first and second plates which are slidably engaged with each other, so as to slide with respect to each other thus to vary the overall length of the bone support plate assembly, the method comprising:

- (a) temporarily fixing the overall length of the bone support plate assembly;
- (b) placing the bone support plate assembly at a mounting location in a recipient user of the bone support plate assembly;

- (c) fastening the first and second plates to first and second bones of the recipient user of the bone support plate assembly; and
- (d) releasing the length fixation so as to accommodate sliding of the first and second plates with respect to each other, and correspondingly accommodating post-procedural settling of such first and second bones with respect to each other.

90. A method as in Claim 89, the method further comprising evaluating the bone structure of the recipient user during the course of installing the bone support plate assembly, and releasing, adjusting, and temporarily re-setting the overall length of the bone support plate assembly prior to completion of the fastening of the first and second plates to the first and second bones of the recipient user.

91. A method as in claim 89, the method comprising providing, as the bone support plate assembly, a bone support plate assembly wherein the first and second plates are adapted to slide with respect to each other during post-procedural settling of such first and second vertebrae with respect to each other, without corresponding movement of the first and second plates with respect to underlying ones of the first and second vertebrae to which the first and second plates are mounted.

92. A method as in Claim 89 including installing, as the sliding bone support plate assembly, a sliding spinal plate assembly.